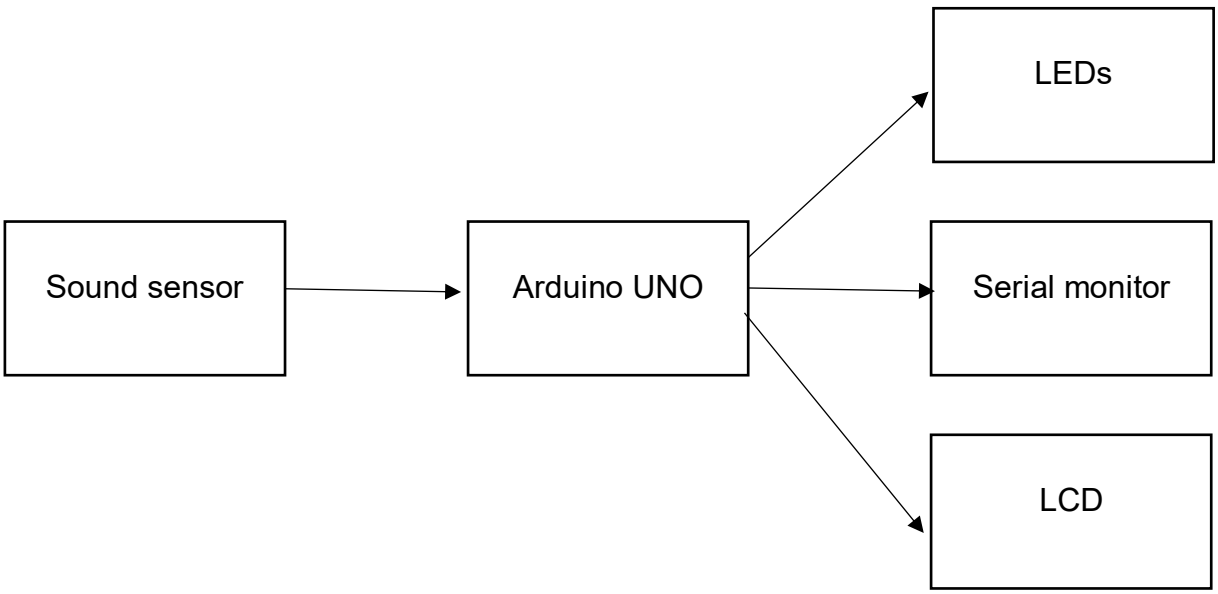
Sound level detector

Iliescu Bianca-Ana-Maria

Description:

The assembly I made detects the level and intensity of the sound produced by any source with the help of a sound sensor. I connected to the Arduino board an LCD screen that displays the sound level through a number, and the intensity is displayed according to the sound level, as follows: "Low" - if it does not exceed the minimum set threshold; "Medium" - if it is between the minimum and maximum threshold; "High" - if it exceeds the maximum threshold. I also connected 3 LEDs that light up in turn depending on the sound level, each corresponding to one of the 3 levels listed above.

Simplified block diagram:



Components:

- Arduino UNO - https://www.optimusdigital.ro/ro/placi-avr/4561-placa-de-dezvoltare-compatibila-cu-arduino-uno-r3-atmega328p-atmega16u2-cablu-50-cm.html?search_query=placa+arduino+uno&results=83

- LCD 1602 - https://www.optimusdigital.ro/ro/optoelectronice-lcd-uri/62-lcd-1602-cu-interfata-i2c-si-backlight-galben-verde.html?search_query=lcd+1602&results=17

- 3 resistors of 220 ohms - https://www.optimusdigital.ro/ro/componente-electronice-rezistoare/10958-rezistor-05w-220.html?search_query=rezistor+220&results=22

- 3 LEDs - https://www.optimusdigital.ro/ro/optoelectronice-led-uri/696-led-rou-de-3-mm-cu-lentile-difuze.html?search_query=led&results=782

- Sound sensor - https://www.optimusdigital.ro/ro/senzori/12664-senzor-de-sunet.html?search_query=Senzor+de+sunet+&results=33

- Breadboard - https://www.optimusdigital.ro/ro/prototipare-breadboard-uri/44-breadboard-400-points.html?search_query=breadboard&results=141

- Jumper wires - https://www.optimusdigital.ro/ro/fire-fire-mufate/12-set-de-cabluri-pentru-breadboard.html?search_query=breadboard&results=141